

controllable by remote control from the managing computer which is connected to the LAN system. More specifically, what is called TCP/IP protocols of various kinds such as TELNET (RFC854), SNMP (RFC1157), TFTP (RFC1350), ICMP (RFC792), and HTTP (RFC1945) are selectively used according to forms of communication between the managing computer and the intelligent interconnecting device.

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10 【0003】 For example, unauthorized operation of the intelligent interconnecting device by someone other than a managing party thereof is conventionally prevented in such a manner in which log-in to the intelligent interconnecting device is made possible by the FTP (RFC765), a user identifier and a password are requested to be inputted after the log-in, and only when they are identical with a predetermined identifier and a predetermined password, the access is authenticated as an access from the managing party and the operation thereafter from this outside managing party is permitted.

25 However, since security for the intelligent interconnecting device is dependent only on the protocol in the above conventional structure and some of the TCP/IP protocols have no security

function, the conventional structure does not
always guarantee highly reliable security. In
other words, take the above conventional apparatus
for example, it does not satisfactorily guarantee
5 security since the authentication by using the
inputted user identifier and password after the
log-in, which is one of the functions that the FTP
has, is not a function which is specially provided
from a viewpoint of preventing an unauthorized
10 access to the intelligent interconnecting device
and furthermore, it has a disadvantage that an
access is easily authenticated as long as the
inputted user identifier and password are
identical with the predetermined user identifier
15 and password even when the access is from a computer
other than the managing computer.

SUMMARY OF THE INVENTION

【0004】 It is an object of the present invention
to provide an unauthorized access avoiding method
20 in an intelligent interconnecting device, an
unauthorized access avoiding program for an
intelligent interconnecting device, a recording
medium in which an unauthorized access avoiding
program for an intelligent interconnecting device
25 is recorded, an intelligent interconnecting device,

and a LAN system which surely realize prevention of an access from a computer other than a pre-designated computer without depending on a security function of a protocol.

5 It is another object of the present invention to provide an unauthorized access avoiding method in an intelligent interconnecting device, an unauthorized access avoiding program for an intelligent interconnecting device, a recording medium in which an unauthorized access avoiding program for an intelligent interconnecting device is recorded, an intelligent interconnecting device, and a LAN system which realize strengthening of a security function to improve reliability only with some new functions added to existing software.

10 [0005] It is still another object of the present invention to provide an unauthorized access avoiding method in an intelligent interconnecting device, an unauthorized access avoiding program for an intelligent interconnecting device, a recording medium in which an unauthorized access avoiding program for an intelligent interconnecting device is recorded, an intelligent interconnecting device, and a LAN system which realize simplification of software for